# CENSUS BULLETIN.

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## AGRICULTURE.

# ALASKA.

Hon. WILLIAM R. MERRIAM,

Director of the Census.

Sir: I have the honor to transmit herewith, for publication in bulletin form, the statistics of agriculture for the territory of Alaska, taken in accordance with the provisions of section 7 of the act of March 3, 1899. This section requires that "The schedules relating to agriculture shall comprehend the following topics: Name of occupant of each farm, color of occupant, tenure, acreage, value of farm and improvements, acreage of different products, quantity and value of products, and number and value of live stock. All questions as to quantity and value of crops shall relate to the year ending December 31st next preceding the enumeration."

The enumeration was made in the summer of 1900 by special agents, the first representatives of a United States census to collect statistics of agriculture in the territory. The tabulated returns indicate that the farming industry is insignificant, being a subsidiary pursuit. The leading industries are mining, fishing, and the canning of fish. The value of the agricultural products was but 12.7 cents for each inhabitant of the territory, and 24.4 cents for each inhabitant of the southern district, in which all the farms reported are located. This is in marked contrast to the agricultural conditions in the states and other territories. For each inhabitant of Arizona the average value of agricultural products in 1899 was \$57, and of the United States, in 1889, \$39.

The area of the 12 farms reported in Alaska in 1900 is 159 acres, of which 104 acres are devoted to the cultivation of vegetables and hay, and the remainder is used for pasturage. The total farm products were valued at \$8,046. These farms are all south of the Kuskokwim River, in southeastern Alaska, and along the southern coast, including the Aleutian Islands. In this section

there are two centers of agricultural activity, one on the southeastern coast in the vicinity of Juneau and Sitka, and the other in the southwest in the region about Cook Inlet and Kadiak Island. The United States Department of Agriculture maintains experiment stations at Sitka, and at Kenai on Cook Inlet, but no reports were secured of the land or live stock owned.

North of the sixty-second parallel agricultural operations are generally confined to small vegetable gardens, from which sales are rarely made. A small farm operated in connection with the Holy Cross Mission, on the lower Yukon, and a few gardens near Circle City produce vegetables for market occasionally. Other small gardens are found in most of the villages of the Yukon Valley.

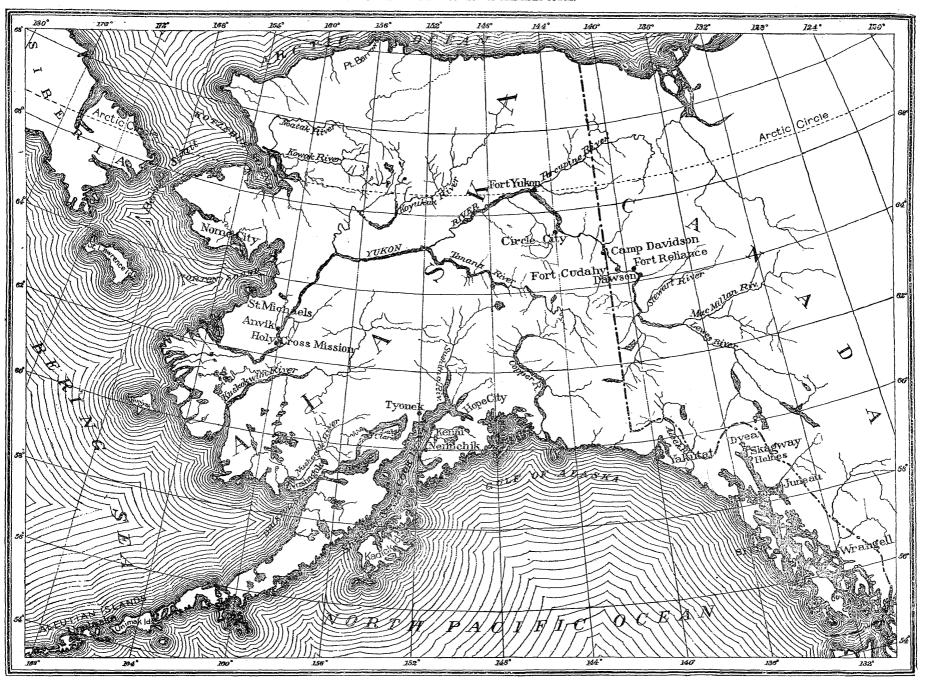
The values given are of the buildings and other improvements only, and not of the land, as no titles have been secured by the farmers, owing to the fact that no official survey has been made.

It is to be regretted that the special agents failed to secure reports concerning the farming operations of the Indians. The Thlingits, inhabiting the southern coast, and the Aleuts, on the Alaskan Peninsula and neighboring islands, have made substantial beginnings in agriculture. Nearly every village of the natives on the southern coast has its community garden, and several individual gardens are found.

A sketch map of Alaska has been included in this bulletin. This, it is believed, will be helpful in locating the places mentioned.

Very respectfully,

Chief Statistician for Agriculture.



## AGRICULTURE IN ALASKA.

## NUMBER, AREA, AND VALUE OF FARMS.

The total farm wealth of Alaska, June 1, 1900, is \$15,686, of which \$2,196 are invested in live stock, \$690 in implements and machinery, and \$12,800 represent the value of buildings and other improvements. Buildings have been erected upon 9 of the 12 farms.

The main expense incurred by the settlers in opening farms has been in the preparation of the soil for cultivation. This has been very high—in some instances \$120 per acre.

SIZE OF FARMS, AND PRINCIPAL PRODUCTS.

TABLE 1.—FARMS CLASSIFIED BY SIZE AND PRINCIPAL PRODUCT.

CLASSES.	Number of farms.	Number of acres.	NUMBER OF FARMS OF WHICH THE PRINCIPAL PRODUCT IS—		
			Vegeta- bles.	Poultry and eggs.	Hay and ensilage.
The Territory	12	159	9	1	2
Under 3 acres 3 and under 10 acres 20 and under 50 acres	5 3 4	5 13 141	4 3 2	1	2

The 5 farms reporting less than 3 acres are all small market gardens. Four are devoted exclusively to the cultivation of vegetables, and on the other farm poultry is raised. The value of the products of these 5 farms in 1899 was \$627, of which \$532 were from vegetables and \$95 from poultry and eggs.

Vegetables are the chief source of income of the 3 farms containing from 3 to 9 acres each. In 1899 these farms, with 13 acres of land under cultivation, yielded \$3,010 worth of produce. Of that amount, vegetables contributed \$2,655; poultry and eggs, \$195; hay, \$160.

The other 4 farms contain from 20 to 49 acres each, and have a total area of 141 acres of improved land. The operators devote small areas to vegetables, and, in addition, cut considerable quantities of grass. The values of the products raised in 1899 were as follows: Vegetables, \$2,378; hay and ensilage, \$1,180; live animals sold, \$310; dairy products, \$292; poultry and eggs, \$249—a total of \$4,409. The principal source of income of 2

of these farms was vegetables, while that of the other 2 was hay and ensilage. The United States experiment station at Sitka in 1899 cleared 6 acres, and the one at Kenai had 3 acres under cultivation.

LIVE STOCK.

Table 2.—DOMESTIC ANIMALS AND POULTRY,
JUNE 1, 1900.

ANIMALS AND FOWLS.	Age, in years.	Number.	Value.
Dairy cowsOxen	Over 3 Over 1 Over 2 All ages	13 4 1 5 10 3 176	\$810 450 55 465 100 150
Total			2, 196

The animals reported, except 1 horse, were found upon the 4 farms containing from 20 to 49 acres each. The work animals comprise 5 horses, valued at \$465; 4 oxen, valued at \$450; and 3 Eskimo dogs, valued at \$150. The dogs were in use experimentally on a farm near Juneau. The relatively higher valuation of oxen than horses is explained by the statement that they are better adapted to farm work in Alaska, as they can be kept at less expense and are less susceptible to cold. The native grasses furnish abundant pasturage in the summer, and roots and ensilage take the place of natural forage in winter.

A herd of 10 swine was found on a farm at Juneau, but no sales were reported in 1899. The lack of grain is an obstacle to success in this branch of stock raising, though it is partially overcome by the substitution of root crops.

Table 2 is for animals on farms only, no enumeration having been made of cows, reindeer, pack dogs, and other live stock owned by Indians, or kept in towns and villages. On many of the small islands along the coast of the Alaskan Peninsula, and notably on Sanak and Shumagen islands, cattle are very successfully raised. No detailed report was obtained of the number of cattle kept on these islands nor of those on Douglas Island, near Juneau, where a number of cows are kept for dairy purposes. The table presents a very incomplete summary, as the unenumerated stock exceeds in number and value the stock reported.

### VEGETABLES.

The cultivation of vegetables occupies the most important place in the agriculture of Alaska. This is the result of natural conditions. The mean annual temperature is too low, and the season between killing frosts too short, to permit the successful cultivation of cereals. The long periods of daylight, the comparatively high temperature, and the abundant rainfall, which mark the brief growing season, are highly favorable to the rapid growth and early maturity of nearly all kinds of vegetables, for which there is an active demand and ready market in the large towns and mining camps. Turnips, including rutabagas, in 1899, returned the largest revenue; potatoes and carrots were also quite remunerative. Onions and pease were successful under favorable circumstances only.

The Moravian missionaries grow vegetables in different parts of the territory, their gardens in the Kuskokwim Valley, and at Carmel, in the Nushagak District, being especially prosperous, but no report was secured.

The following table indicates the number of farms on which the different varieties of vegetables were grown, the area devoted to each, the quantities produced, and values:

TABLE 3.-VEGETABLES GROWN IN 1809.

PRODUCTS.	Number of farms report- ing.	Number of acres.	Unit of measure.	Quantity.	
The Territory		26	and the Control of the Con	to See make 1856 as Sc	<b>\$</b> 5,665
Beets	4 9 22 7 1 3 1 1	2 3 6 1 8	Bushels Hends Bushels Bunches Bushels do do do Bunches do Bunches	171 1,415 680 400 506 7 3 798 16,460 50 987	2005 141 850 80 750 10 8 1,371 708 3 1,300

The greater portions of the lettuce and radishes reported were grown near Juneau in a hothouse in which several crops were raised within the year.

## HAY AND ENSILAGE.

Next to vegetables, grass cut for hay and ensilage is the most important agricultural product. Upon 6 farms 78 acres of grass were mowed, yielding a product of 113 tons. Very little of it properly can be called hay. Experience has shown that the uncertain climate renders impracticable any attempt to cure the heavy native grasses in the ordinary manner. This difficulty has been met by the construction of silos, of which in 1899, there were 4, having a total capacity of 130 tons. Very little, if any, "tame" grass is grown, and the silos are filled with beach, or other native grasses, several varieties of which grow in abundance, both on the coast and in the interior.

Table 4. CROPS AND PRODUCTS OF 1899.

PRODUCTS.	Number of larger report ing.	String wit	Product vik advisophik vik hospionistike.	tenatility.	Value.
The Territory		101	and the second of the second		% w 20 <b>2</b> 1
Vegetables Hay and ensilinge Chickens Eggs Calves, sold Milk Butter	14 24 1	7.00	Terre Nationalises Proportion righteethe Proportie		14, 1966 8, 1984 8 206 1964 2084 2084 8884 8884

From the 13 cows reported in 1899, \$392 were realized from dairy products and \$310 from the sales of yeal calves.

## POULTRY.

From the standpoint of income upon capital invested, poultry raising in 1899 was relatively the most profitable branch of Alaskan agriculture. The stock on hand, June 1, 1900, consists of 176 fowls, valued at \$156. The total income was \$539 in 1899. Of this sum, \$360 were derived from eggs, and \$179 from the sale of chickens. Eggs found a ready market at an average price of 43 cents per dozen, while the average amount received for fowls was \$1.01 each.

### AGRICULTURE BY INDIANS.

Potatoes, cabbage, turnips, carrots, lettuce, radishes, and other vegetables of the hardier varieties are cultivated by the Indians, potatoes being the principal crop. At Tyonek, in a recent favorable year, over and bushels of potatoes were raised. Some barley was grown on Kadiak Island from seed furnished by the agricultural experiment stations. With that exception, no cereals have been successfully grown. Enough hay is usually gathered to feed the domestic animals through the winter. The wild grass is cut with sickles and hung on trees or poles to cure. The Indians understand the importance of fertilizing, and gather large quantities of kelpand seaweed for the purpose.

Stock raising is a very limited industry, although the number of domestic animals owned by the natives is greater than that reported for the farms. At Nenilchik, they own over 30 head of neat cattle, each family having at least one cow. The cows are of hardy Russian stock, are small, and give but little milk.

Near some villages, contact with white men has taught the natives the use of improved farm utensils, but in other localities they till the land with staves and other crude implements. The missionaries are introducing modern tools among the Indians, and are instructing them in improved methods of agriculture. The establishment of agricultural experiment stations has been very beneficial, and gives promise of accomplishing still greater results.